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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,063

06/29/2005

Koji Utsugi

8017-1172

3808

466 7590 02/03/2011

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EXAMINER

ENIN-OKUT, EDU E

ART UNIT

PAPER NUMBER

1727

NOTIFICATION DATE

DELIVERY MODE

02/03/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary	Application No. 10/541,063	Applicant(s) UTSUGI ET AL.	
	Examiner Edu E. Enin-Okut	Art Unit 1727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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ELECTROLYTE SOLUTION FOR SECONDARY BATTERY
AND SECONDARY BATTERY USING SAME

Detailed Action

1. The amendments filed on January 11, 2011 were received. Applicant has amended claim 13. Claim 13 is pending.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. The rejection of claim 13 under 35 U.S.C. 102(a) and 35 U.S.C. 102(b) as being anticipated by Julji et al. (JP 09-301981 A) is withdrawn because applicant's argument on p. 5 was persuasive.

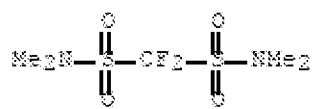
The rejection of claim 13 under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Lim et al. (US 2004/0214091) is withdrawn because applicant has perfected its foreign priority claims to Japanese Patent Application No. 2003-416516 by providing a certified English translation of that document filed on January 11, 2011.

The rejection of claim 13 under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Adachi et al. (WO 2004/072021) is withdrawn because claim 13 was amended.

4. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt et al. (KR 2001-0067251; see Derwent Abstract, machine translation, and Chemical Abstract Service (CAS) citation).

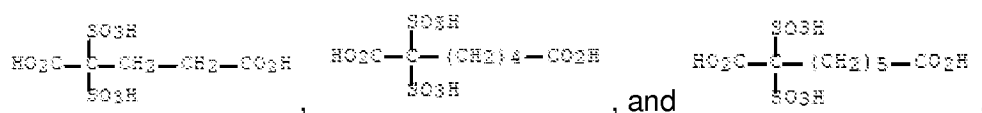
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Regarding claim 13, Schmidt teaches an electrolyte useful in electrochemical cells that includes an additive, a compound having the formula $X-(\text{CZY})_m\text{-SO}_2\text{N}(\text{CR}_1\text{R}_2\text{R}_3)_2$ (where $X = \text{H}$, F , Cl , $\text{C}_n\text{F}_{2n+1}$, $\text{C}_n\text{F}_{2n-1}$, or $(\text{SO}_2)_k\text{N}(\text{CR}_1\text{R}_2\text{R}_3)_2$; and, $Y = \text{H}$, F , or Cl ; and, $Z = \text{H}$, F , or Cl ; and, R_1 , R_2 , $\text{R}_3 = \text{H}$ and/or an alkyl group, a fluoro alkyl group, or a cycloalkyl group; and, $m=0-9$ (not 0 if $X=\text{H}$), $n=1-9$, and $k=0$ if $m=0$ or $k=1$ if $m=1-9$), such as a methanedisulfonamide with the following structure (Derwent Abstract, p. 2-3; machine translation, p. 3; CAS citation):



5. Claim 13 is rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Suzuki (JP 2004-193408 A; see JPO Abstract, Derwent Abstract, and CAS citation).

Regarding claim 13, Suzuki teaches electrolytes useful in capacitors that includes 1-20 wt % of a sulfodicarboxylic acid or its salt, having formula $\text{HO}_2\text{C-C}(\text{R}_1)(\text{R}_2)\text{-(CH}_2)_n\text{-C}(\text{R}_3)(\text{R}_4)\text{-CO}_2\text{H}$ (where $\text{R}_1\text{-R}_4 = \text{H}$ or sulfo group; and, $n=1-6$), dissolved in a solvent containing ethylene glycol (Derwent Abstract). These sulfodicarboxylic acids include 2,2-disulfo-pentanedioic acid, 2,2-disulfo-heptanedioic acid, and 2,2-disulfo-octanedioic acid with the formulas as shown below (CAS citation):



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Double Patenting

6. The provisional rejection of claim 13, on the ground of nonstatutory obviousness-type double patenting, as being unpatentable over claims 1 and 12 of copending Application No. 10/582,855 is maintained. The rejection is repeated below.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims an electrolyte additive. The disclosure of the instant application differs from Application No. 10/582,855 in that the instant application does not teach the use of the additive in a secondary battery. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the additive in a lithium secondary battery to improve its capacity retention ratio and suppress an increase of resistance during storage (see instant application disclosure, para. 32).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

7. Applicant's arguments, filed on January 11, 2001, with respect to the Julji, Lim and Adachi references have been fully considered and are persuasive as noted above. The rejections using those references have been withdrawn. However, applicant has amended the claims such that new grounds of rejection were necessitated.

Conclusion

8. The prior art made of record and not relied upon in the previous Office Action, Michot et al. (US 6,620,546) and Martyak et al. (WO 2004/101860), remain pertinent to applicant's disclosure.

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9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Edu E. Enin-Okut** whose telephone number is **571-270-3075**. The examiner can normally be reached on Monday to Thursday, 7 a.m. - 3 p.m. (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edu E. Enin-Okut/
Examiner, Art Unit 1727

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1727